

2007 CENSUS OF AGRICULTURE

2008 Farm and Ranch Irrigation Survey

Oklahoma State Profile

The 2008 Farm and Ranch Irrigation Survey shows that Oklahoma farmers and ranchers are irrigating fewer acres. According to the report, 461 thousand acres of farmland in Oklahoma were irrigated in 2008. This is a decrease from the 509 thousand acres irrigated in 2003.

In addition, fewer acres were irrigated with sprinkler systems in 2008 than in 2003. During this five year period, the area irrigated by sprinkler systems decreased 8 percent to 399 thousand acres in 2008. The area with gravity irrigation declined 12 percent to 68 thousand acres in 2008.

Water Applied

Between 2003 and 2008, the total quantity of water applied decreased 12 percent to 525 thousand acre-feet of water. With the corresponding decrease in acres irrigated the average acre-feet applied by all methods decreased from 1.2 to 1.1 acre feet per acre.

Percent 2008 2003 Change Farms with Irrigation 1,454 1,819 -20 461,000 509,000 -9.4 Acres Irrigated Acre-feet Applied 525,000 608,000 -13.6 NA Sprinkler System Only 1.1 acre-feet 1.2 acre-feet **Gravity Flow Systems** 1.3 acre-feet 1.4 acre-feet NA Only

U.S. Department of Agriculture

National Agricultural Statistics Service

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Water Source

The number of acres irrigated using ground water and on-farm water decreased from 2003, while the number of acres irrigated using off-farm water increased.

	2008	2003	Percent Change
Ground Water			
Acres Irrigated	382,000	413,000	-8
Acre-feet Applied	435,000	507,000	-14
On-Farm Water			
Acres Irrigated	36,000	63,000	-43
Acre-feet Applied	34,000	60,000	-43
Off-Farm Water			
Acres Irrigated	46,000	37,000	+24
Acre-feet Applied	56,000	41,000	+37

Irrigation Wells

Since 2003, the number of wells with flow meters increased 396 percent to 495 wells. The number of wells with backflow prevention devices also increased. In 2008, backflow prevention devices were on 2,550 wells, an increase of 9 percent.

In 2008, the average well depth increased 17 feet to a depth of 237 feet. The average depth to the bowls increased from 182 feet in 2003 to 202 feet in 2008. Furthermore, the average depth to water increased by 6 feet to 119 feet.

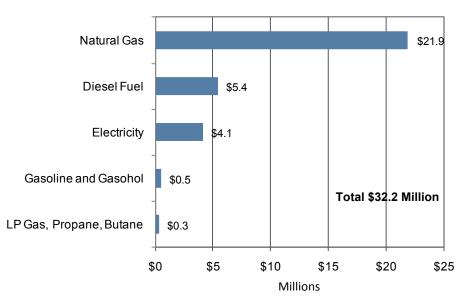
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Irrigation Expenses

Farmers and ranchers spent \$16.4 million on expenses related to irrigation equipment, facilities, land improvements and computer technology in 2008. Of those expenses, 54 percent was used for replacement of existing equipment, 26 percent for new expansion and 20 percent for water conservation.

The total expenses for energy to power pumps increased 91 percent since 2003. With 21 percent fewer pumps used in 2008, the energy expenses for pumps totaled 32.2 million.

Energy Expenses for Pumps, 2008



Energy and Water Conservation

Between 2003 and 2008, a total of 568 farms implemented changes in equipment or management practices that reduced energy use and/or conserved water. Nearly 44 percent of these farms reported reduced energy cost and 46 percent reported a reduction in the amount of water applied.

Additionally, in 2008 there were 3 farms that purchased a total of 90 acrefeet of reclaimed water at \$33 per acre-foot.

2008	Farms	Acres Irrigated
Recycled Water	77	5,163
Reclaimed Water	40	3,775

Oklahoma's Top 5 Irrigated Crops

- 1. **Wheat**, 147,000 acres
- 2. **Corn** 95,000 acres
- 3. **Cotton** 60,000 acres
- 4. Other Hay 35,000 acres
- 5. **Sorghum for Grain** 27,000 acres

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Oklahoma Irrigated Horticultural Operations Overview

	2008	1998			
Irrigated Horticultural Operations					
Area Under Protection (operations)	184	118			
Square Feet Irrigated	2,863,686	3,401,000			
Area in the Open (operations)	154	75			
Acres Irrigated	19,836	4,905			
Irrigated Operations by Type of Irrigation: Area under Protection					
Hand Watered					
Operations	142	99			
Square Feet Irrigated	1,389,459	2,378,000			
Sprinkler System					
Operations	68	36			
Square Feet Irrigated	824,007	822,000			
Drip Irrigation					
Operations	33	29			
Square Feet Irrigated	674,400	125,000			
Irrigated Operations by Type of Irrigation: Area in the Open					
Hand Watered					
Operations	34	16			
Acres Irrigated	27	65			
Sprinkler System					
Operations	110	44			
Acres Irrigated	17,634	4,200			
Drip Irrigation					
Operations	45	23			
Acres Irrigated	2,571	602			
Irrigated Crops by Type of Crop- (**Figures for 1998 not available)					
Area Under Protection Crops	Number of Farms	Sq. feet Irrigated			
Floriculture and Bedding	126	1,599,619			
Nursery	33	522,000			
Propagative Materials	35	283,447			
Food Crops	24	11,520			
Acres in the Open-Crops	Number of Farms	Acres Irrigated			
Floriculture and Bedding	28	285			
Nursery	67	1,488			
Propagative Materials	4	310			
Sod	57	17,647			
Christmas Trees	10	50			



For more information:

www.nass.usda.gov

www.agcensus.usda.gov

Agricultural Statistics Hotline: (800)727-9540

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